

## **Cloud County**

## Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/25/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 18 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Cloud County economy.<sup>1</sup>

These 18 sectors have a total direct output of approximately \$137.0 million and support 569 jobs in Cloud County. Running the model for all 18 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Cloud County Economy							
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>		
Direct Effect	569.2	11.53%	\$42,942,207	16.11%	\$136,980,743		
Indirect Effect	143.0	2.90%	\$9,802,241	3.68%	\$20,270,569		
Induced Effect	162.2	3.28%	\$8,994,960	3.38%	\$17,627,590		
Total Effect	874.5	17.71%	\$61,739,409	23.17%	\$174,878,902		

As shown in the above table, agriculture, food, and food processing sectors support 875 jobs, or 17.71% of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 18 agriculture, food, and food processing sectors is approximately \$61.7 million, or 23.17% of the GRP.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

1 Article on building a contribution analysis in IMPLAN that avoids double counting: https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value added = labor income + indirect business taxes + other property type income.

4 GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

5 Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **287 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Cloud County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	287.0	\$42,927,442		
Grain farming	73.3	\$34,147,720		
All other industrial machinery manufacturing	45.5	\$10,781,367		
Wholesale trade	44.3	\$8,446,546		
Animal production, except cattle and poultry and eggs	42.0	\$6,403,054		
All other crop farming	26.8	\$2,650,289		
Landscape and horticultural services	24.5	\$1,303,173		
Real estate	22.6	\$1,557,271		
Oilseed farming	19.2	\$25,460,487		
Truck transportation	18.4	\$2,785,314		

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately \$42.9 million to the Cloud County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	287.0	\$42,927,442		
Grain farming	73.3	\$34,147,720		
Oilseed farming	19.2	\$25,460,487		
All other industrial machinery manufacturing	45.5	\$10,781,367		
Wholesale trade	44.3	\$8,446,546		
Animal, except poultry, slaughtering	11.6	\$7,732,110		
Animal production, except cattle and poultry and eggs	42.0	\$6,403,054		
Owner-occupied dwellings	0.0	\$3,459,076		
Dairy cattle and milk production	6.2	\$3,062,465		
Monetary authorities and depository credit intermediation	15.6	\$2,839,828		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Cloud County economy.

All Agriculture, Food, and Food Processing Sectors				
Sector	Total Employment	Total Output		
Oilseed farming	19.2	\$25,460,487.37		
Grain farming	73.3	\$34,147,720.34		
Vegetable and melon farming	0.3	\$81,789.82		
Fruit farming	0.3	\$31,499.62		
Greenhouse, nursery, and floriculture production	0.4	\$76,388.60		
All other crop farming	26.8	\$2,650,289.30		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	287.0	\$42,927,440.64		
Dairy cattle and milk production	6.2	\$3,062,465.43		
Poultry and egg production	0.1	\$50,867.06		
Animal production, except cattle and poultry and eggs	42.0	\$6,403,054.24		
Commercial hunting and trapping	1.0	\$19,448.10		
Support activities for agriculture and forestry	11.9	\$436,976.22		
Animal, except poultry, slaughtering	11.6	\$7,732,110.50		
Bread and bakery product, except frozen, manufacturing	4.5	\$509,602.55		
Frozen cakes and other pastries manufacturing	0.3	\$41,637.58		
All other industrial machinery manufacturing	45.5	\$10,781,366.35		
Veterinary services	14.5	\$1,264,425.40		
Landscape and horticultural services	24.5	\$1,303,172.95		

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Cloud County, the retail sector was omitted.